



**COLORADO**  
Department of Education

Colorado State Board of Education

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TRANSCRIPT OF PROCEEDINGS  
BEFORE THE  
COLORADO DEPARTMENT OF EDUCATION COMMISSION  
DENVER, COLORADO  
March 12, 2015, Part 1

BE IT REMEMBERED THAT on March 12, 2015, the  
above-entitled meeting was conducted at the Colorado  
Department of Education, before the following Board  
Members:

Marcia Neal (R), Chairman  
Angelika Schroeder (D), Vice Chairman  
Steven Durham (R)  
Valentina (Val) Flores (D)  
Jane Goff (D)  
Pam Mazanec (R)  
Debora Scheffel (R)



1                   MADAM CHAIR: The meeting of the Colorado  
2 State Board will come back into action this morning. Good  
3 morning, everyone. We all made the news last night and  
4 this morning. We're a hot topic here.

5                   The next item on the agenda for today is a  
6 study session concerning the CMAS Assessment Data  
7 Collection, which we will be focused on data collection,  
8 protection, and security of the CMAS data.

9                   First, we will receive a brief presentation  
10 from CDE staff and Pearson during which they will be  
11 answering questions that have been submitted online to the  
12 State Board webpage by the public. Joyce Zurkowski will  
13 read the questions and Pearson will respond.

14                  Second, after the presentation the State  
15 Board will engage questions to Pearson.

16                  Third, after taking questions from the State  
17 Board, I will turn back over to Joyce and Pearson to  
18 respond to any remaining questions from the public through  
19 the State Board webpage.

20                  Fourth, we will take questions from the  
21 public through note cards. Note cards have been  
22 distributed. Please write your questions on the note card.  
23 We will collect those questions. Any questions we do not  
24 reach today will be addressed through the frequently



1 answered questions.

2                   Please note that this study session is  
3 focused on CMAS assessment data collection, security, and  
4 privacy. Questions outside this area regarding general  
5 data collection and security or general assessment issues  
6 will be addressed through the frequently asked questions  
7 that will be posted on the website.

8                   Commissioner?

9                   MR. HAMMOND: Madam Chair, thank you very  
10 much and thank you for outlining kind of the process. One  
11 of the things we've heard from the Board is we just intend  
12 to have this a brief session for not any longer than 30  
13 minutes, with Joyce opening it up but also with  
14 representatives here from Pearson. They have obtained many  
15 of the questions. We have received several questions. We  
16 have tried to categorize the ones, some that weren't more  
17 appropriate for the session, and those that were. But then  
18 it comes back to you for further dialogue and then, as time  
19 goes on, back to the public and the audience for further  
20 questions.

21                   So with that I'll turn it over to Ms.  
22 Zurkowski. Thank you.

23                   MS. ZURKOWSKI: Madam Chair.

24                   MADAM CHAIR: Yes, Joyce.

25                   MS. ZURKOWSKI: As the Commissioner pointed



1 out, the purpose of today's presentation is to support CDE  
2 in responding to State Board requests for information  
3 regarding the data collection for the Colorado Measures of  
4 Academic Success, CMAS. That does cover our science and  
5 social studies assessments as well as our English language  
6 arts and mathematics assessments.

7 Pearson is prepared to talk within the scope  
8 of our contract. To my left is Walter Sherwood. He is  
9 president of Pearson State Assessment Services. Next to  
10 him is Jim Hill, vice president of Pearson State Assessment  
11 Services. And next to me, on the right, is Randy  
12 Schuessler, vice president, assessment technology services.

13 In terms of the opening part of this  
14 presentation, I'm going to talk a little bit about why it  
15 is that we do student data collection and how that data  
16 will be used. Then Walter will address contract security  
17 requirements as well as key statements, and then we will go  
18 back and forth addressing the questions that were submitted  
19 by the public. As you may recall at your last Board  
20 meeting you requested that we open up a website so the  
21 public could submit their questions. We have categorized  
22 those in broad categories, and we'll address them as  
23 appropriate. There are some questions that we will not  
24 address that dealt with issues outside of the CMAS data  
25 collection, but we do want to let you know that we will be



1 posting an FAQ that will address every question that we  
2 received.

3 Broad category number one -- why is student  
4 data collected and how will it be used?

5 The questions submitted by the public were  
6 why do you need it, the student data? Who decided what  
7 data would be collected? Why does Pearson need to collect  
8 information beyond the state ID (SASID), student name,  
9 grade, and school? Does Pearson really need to know  
10 students have IEPs and the specific disability of a  
11 student? Why do you feel it's your moral and ethical right  
12 to collect information on my child beyond test results?  
13 How will the data be disaggregated, i.e., by race, age,  
14 gender, school attendance, test scores, et cetera? What  
15 purpose is the data collected? How will CDE and Pearson be  
16 using the data? Will student data be used to develop any  
17 products, including, but not limited to, the PARCC  
18 assessment?

19 At a high level, here's our response to  
20 those questions. They will also be further addressed  
21 throughout the presentation.

22 The assessment data is collected so that we  
23 can provide information to parents on their child's  
24 attainment of the grade level skills and concepts found in  
25 the Colorado Academic Standards. The state assessments



1 serve as an external benchmark used across the state. It  
2 is the only consistent assessment that is used across the  
3 state. So as we're looking at our students meeting the  
4 expectations set by the standards, this is the only  
5 assessment that answers that for all of our students.

6                   The data is also used to support the  
7 evaluation of schools and districts under both state and  
8 federal law. Both state and federal law require that we  
9 report out results by subgroups. As an example, gender,  
10 race/ethnicity, language proficiency, disability category,  
11 accommodations, migrant, et cetera. Every piece of student  
12 data that we collect we are required to collect either  
13 under state or federal requirements.

14                   We report out that information by subgroup  
15 to ensure that no subgroup's performance is being masked by  
16 another group's performance. Exemplified historically, we did  
17 not have accurate information about how students with  
18 disabilities were performing because their performance was  
19 masked by the overall student group.

20                   You can see some of the reports that we put  
21 out at the website specified on the slide. We post results  
22 on our assessment website that does report out at the state  
23 level as well as at the district level by these subgroups.  
24 Anyone is welcome to go look at that website and they can  
25 see all of the categories. Again, this is very open, very



1 transparent.

2                   Demographic information is also used to  
3 evaluate the quality of our assessment items, and this  
4 helps us to ensure the assessments are indeed fair, valid,  
5 and reliable.

6                   With that I'm going to pass it on to Walter  
7 Sherwood.

8                   MR. SHERWOOD: Thank you, Joyce. Madam  
9 Chair, good morning, and thank you for the opportunity to  
10 speak with you all today. I'm going to make a couple of  
11 general overview statements that are, in a lot of ways,  
12 guiding principles about our data privacy and data security  
13 and data collection efforts around the Colorado contract  
14 and our state assessment contracts in general.

15                   Before I do that, I know Joyce introduced  
16 me. Again, I'm Walter Sherwood, the president of our State  
17 Assessment Services. I'm responsible for our student  
18 assessment programs.

19                   Pearson is the contractor to the State of  
20 Colorado and abides by the requirements of that contract.  
21 The student information from the Colorado State Assessments  
22 is the property of the state. It is not owned by Pearson  
23 and cannot be used by Pearson in any manner not authorized  
24 by the state.

25                   Student data security and privacy is



1 foremost in our execution of the contract requirements.  
2 Our policies, our systems, our processes, our controls and  
3 monitoring are designed to protect unauthorized use of  
4 student data. We continually collaborate with all of our  
5 state customers to refine and improve any processes or  
6 policies related to student information, security, and  
7 privacy.

8                   And a couple of things that we don't do. We  
9 do not share any student information used in our assessment  
10 programs unless requested or authorized by the state. We  
11 do not share state assessment information within Pearson or  
12 its partners for the purposes of product development or  
13 marketing, and we do not sell any state assessment student  
14 information to anyone.

15                   I wanted to touch on a couple of the key  
16 provisions within the contract with Colorado. Pearson is  
17 contracted to perform an essential function of the State of  
18 Colorado. It is providing services at the direction of CDE  
19 and in compliance with state and federal policy and legal  
20 requirements. Pearson is bound by contract to comply with  
21 the student data protection measures that Colorado has  
22 prescribed. The student data protection requirements in  
23 Colorado's contract with Pearson are rigorous, detailed,  
24 and are thoroughly addressed throughout the hundreds of  
25 pages of the contract. CDE's information security and





1 privacy policy and specific contract terms with Pearson can  
2 be accessed online at the website provided here.

3 Pearson is also bound by the contract to  
4 handle student data within the confines of, and subject to  
5 the requirements of the Family Educational Rights and  
6 Privacy Act, FERPA, as well as the Student Data Privacy,  
7 Accessibility, Transparency, and Accountability Act of  
8 2014.

9 Key provisions within the contract with  
10 Colorado include confidentiality -- Pearson is bound by  
11 comprehensive confidentiality terms which prohibit the  
12 sale, distribution, or retention of confidential  
13 information, and require Pearson to maintain a secure  
14 environment; restricted use -- Pearson may not use any data  
15 to generate through the assessments for its own purposes;  
16 employee preparation -- Pearson employees who handle  
17 student data must undergo background checks, receive  
18 training, including a security awareness program, and  
19 signed confidentiality agreements; security protocols --  
20 Colorado prescribes stringent security protocols for  
21 electronic transmission, shipping, accessing, scoring,  
22 storing, and destruction of secure materials. And you will  
23 note that the references to those provisions within the  
24 contract are listed here on the slide.

25 MS. ZURKOWSKI: Going back to some of the



1 questions that were submitted through the online survey, at  
2 a broad level these next questions deal with what student  
3 data is collected. Questions submitted by the public:  
4 Exactly what data are you collecting? What data do you  
5 collect? What type of data is actually collected? What  
6 data is being collected? What data are you collecting on  
7 the PARCC testing? What info will be collected? Complete  
8 list, please. I'd like the definitive list of exactly what  
9 data is being collected and whether it's being collected  
10 anonymously, not tied to my child's PII, or if it will  
11 become part of his record in your database. Why it's being  
12 collected and with whom it will be sold to and/or shared?  
13 Why do they need to identify specific students' ID? What  
14 data is collected, including PII, non-PII, metadata,  
15 paradata, social, behavioral, and emotional psychometrics,  
16 any and all information or data that can be collected  
17 online when a child is logged on for a CMAS or a PARCC  
18 test?

19 Randy.

20 MR. SCHUESSLER: Good morning. It's a  
21 pleasure to be here. My name is Randy Schuessler. I  
22 oversee technology delivery for our state large-scale  
23 assessment programs. So that includes the configuration,  
24 setup, and operation of the technology supporting programs  
25 such as CMAS.



1                   So it's an honor to be here. I'd like to  
2 provide transparency to the questions that have been asked,  
3 specifically about the data we collect. To make this  
4 simple we've tried to organize the data into five specific  
5 areas. The first two are covered on this slide. The first  
6 area is what we consider the identity data that helps us  
7 identify a specific student to make sure that a test is  
8 being assigned to the individual.

9                   So the five key points of identification  
10 data are, of course, the name of the student, the SASID,  
11 the state-level identifier, optionally, a local student  
12 identifier, the date of birth, and the gender. And these  
13 criteria together give a high-confidence match that we have  
14 the correct student receiving the correct assessment.

15                  The second category of identity data that we  
16 collect is the registration data associated with a specific  
17 assessment, in this case, CMAS, CoAlt, et cetera. This  
18 data is required for state and federal reporting of the  
19 assessment results for specific administrations, and this  
20 is often referred to as the demographic data that we talked  
21 about. And all of these data are outlined in our contract  
22 as well as the requirement specification for collection.

23                  So the data, as shown on the right here, are  
24 the testing district and school, which often, or in some  
25 cases may differ from where the student will be reporting,



1 at a different district and school; the testing grade; race  
2 and ethnicity; and then the federal race, ethnicity, and  
3 reporting field; economic status; 504 plan; migrant;  
4 immigrant; language background; primarily disability;  
5 homeless; language proficiency; bilingual; English as a  
6 second language; Colorado continuously; continuous in  
7 district; continuous in school; date most recently enrolled  
8 in the U.S.; expelled; gifted/talented; IEP; title 1; and  
9 October new to a school.

10                   And several of those fields are required to  
11 be provide before a student can begin an assessment, and,  
12 most importantly, those are the testing school and  
13 district, the testing grade.

14                   So these layouts are available on CDE's  
15 website at the address shown at the bottom of the page.

16                   The third area where we collect data then is  
17 as a student is about to take a test. So we need to  
18 identify specific test administration information as well  
19 as any accommodations that the student is to receive. So  
20 specifically the test being administered; a testing group  
21 that the student may be in for testing; and any  
22 accommodations. So this may include presentation, such as  
23 text-to-speech, color contrast, Spanish audio; response  
24 type accommodations, such as providing a written response  
25 as an alternative mechanism; and any accommodations around



1 timing or setting, such as extended time that an individual  
2 may need.

3                   The fourth area for which we collect data is  
4 what we call device and response data. So this is data  
5 that is collected during the testing for the purposes of  
6 scoring, any technical troubleshooting that we need to do,  
7 as well as any anomaly analysis around the test delivery.

8                   Specifically, the data that we collect are  
9 information about the device, so the type of device being  
10 used, such as a tablet, Chromebook, a PC a browser, the  
11 operating systems the network IP address, as well as any  
12 error codes that are encountered during the test delivery.

13                   Most importantly, we collect the responses  
14 from the students. That includes not only the most recent  
15 response but all previous responses that the student  
16 selected during the session. We also auto-save any essay  
17 responses every two minutes, as a protection, to make sure  
18 we have their latest responses.

19                   As the student navigates from item to item,  
20 certain items have tools which can be used. We are  
21 required to maintain that tool state information, so that  
22 if a student navigates back to that item, the tools such as  
23 a highlighter, a notepad, or item eliminator are still in  
24 the same state they were when they previously saw that  
25 item, and it doesn't get reset back to an originating



1 state.

2                   We collect time stamps at key points  
3 throughout the test. So the test start and end, as they  
4 navigate through screens, as well as the times of all of  
5 their responses. We collect the total time on item. We  
6 collect status, then, about the item on whether it was  
7 viewed, not viewed, answered, or not answered, and then we  
8 collect an overall status of the test itself. Is it ready,  
9 is it active, has it already been exited, resume status,  
10 and is it completed.

11                   And then the fifth area in which we collect  
12 student data is the category of post-test data, and this is  
13 data that tries to identify why a student might not have  
14 fully reportable testing data. So there may be reasons why  
15 a student didn't test, a reason to avoid the test, and any  
16 associated reporting codes that have been prescribed by the  
17 state.

18                   So also to answer a little bit to other  
19 questions about what information is collected from students  
20 online, students, when they sign into our system to take a  
21 test, use a randomly generated username and password that  
22 is assigned to that specific student's name. The students  
23 do not provide any personally identifiable information.  
24 And all of the device and response data is collected at the  
25 time of testing.



1                   Now in addition to the assessment itself we  
2 do collect survey data from students, but this is optional  
3 and de-identified to the student. So they're given an  
4 opportunity to provide feedback on the online testing  
5 experience, so that can help inform decisions about how to  
6 improve the system. That includes the assessment and the  
7 technology. So they are asked questions regarding their  
8 testing experience. Were they able to navigate through the  
9 system, were the tools helpful, how did the level of  
10 difficulty of the test compare to typical classwork, and  
11 about the frequency of computer use in the home and at the  
12 school. And this open-ended feedback from the students  
13 that help us improve the system.

14                   And these surveys are connected with live  
15 assessments, they are optional, and they are either  
16 delivered separately, and there is no student PII attached  
17 to the survey results. And we have provided links to those  
18 surveys on the sites, at the links shown there.

19                   MS. ZURKOWSKI: What types of data are not  
20 collected? The questions submitted by the public: What  
21 data will be collected and will it become intrusive in  
22 family matters? With data hacks occurring more frequently,  
23 it's highly unlikely people will be comfortable having data  
24 collected about entire families, their habits, their views,  
25 their lives. What assurances that are believable will we



1 have that sensitive data would be safe?

2                   Do they ask for any private data from  
3 students other than name, age, grade, school identification  
4 number? If so, what and why? As a side note, I have  
5 instructed my daughter to answer no personal questions on  
6 assessments other than her name, date of birth, and gender.  
7 There are no other personal questions that I consider to be  
8 the business of the state or feds.

9                   MR. SCHUESSLER: This is perhaps one of the  
10 most important topics we present today, to address public  
11 concerns as well as to correct misinformation that may be  
12 distributed about the assessment program.

13                   We want to be very clear and transparent  
14 about the types of data that we do not collect. The data  
15 that we do not collect include any type of national  
16 identifier, such as Social Security number, military ID,  
17 green card number; no information about addresses for the  
18 student; no online addresses, such as email, social media  
19 addresses, Twitter, Facebook; no academic records, courses,  
20 grades, other test scores; no disciplinary or criminal  
21 records; no medical or health records; no biological traits  
22 or pictures; no non-academic personal information, such as  
23 family members, religious or political affiliation, any  
24 sexual behaviors, gun ownership, drug use, illegal  
25 activity, or anything of the sort; and we do no stealth





1 technology monitoring. We do no keyboard logging, no  
2 cameras on the devices during testing.

3 MS. ZURKOWSKI: How is data stored,  
4 protected, and accessed? Questions submitted by the  
5 public:

6 How exactly, where exactly, what exactly is  
7 the data collected on my children stored, and who has  
8 access to it? How is [student data] protected? Do any of  
9 the technical support functions for PARCC reside outside of  
10 the United States? If so, how is data protected as these  
11 support staff for Pearson have access to all student data?  
12 Target, Home Depot, Blue Cross/Blue Shield, National  
13 Archive and Records Administration, Epsilon, Evernote,  
14 Living Social -- none of them could keep our data safe.  
15 What makes you think we're going to trust you to keep our  
16 children's data safe?

17 With the regular security breaches we see in  
18 major companies (Anthem, Chase, Home Depot, Target, et  
19 cetera) why, not how, do you perceive the data collected  
20 will be secure? Who has access to it, the student data?

21 MR. SCHUESSLER: So Pearson, particularly  
22 under its assessment business, has put in rigorous controls  
23 to help manage risk to our customers, employees, and any  
24 company-sensitive information and operations. We have an  
25 Information Security Management Systems, sometimes referred



1 to as an ISMS, that's based on the widely-used ISO  
2 27001/27002 standards. We have a risk management framework  
3 that's based on the ISO 31000 Risk Management Framework.

4 I'll cover more in depth on the following  
5 slides, but we have state-of-the-art technologies  
6 implemented in our systems and our operating procedures,  
7 that include the encryption of all data in motion and at  
8 rest, role-based security, real-time security monitoring,  
9 and proactive security vulnerability scanning and  
10 penetration testing. And then we have security operations  
11 center that works for the detection, identification, rapid  
12 response, escalation, and resolution of security and  
13 privacy incidents.

14 Some of the state-of-the-art technologies  
15 that we use, a multi-level firewall infrastructure to  
16 monitor and control network traffic attempting to  
17 communicate with Pearson; intrusion prevention systems to  
18 further monitor and restrict traffic on Pearson's internal  
19 network; anti-distributed denial of service systems that  
20 help block malicious network attacks. As you may know,  
21 some of those have occurred in the last week for another  
22 statewide assessment program from another provider. Strong  
23 data encryption, AES-256, which is applied to the database  
24 and to all data links, so as a student is transmitting data  
25 to us, as well as communications between each of our



1 servers. Internal vulnerability testing to scan for  
2 vulnerabilities in our applications and all our network  
3 devices.

4                   Then we have external vulnerability and  
5 penetration tests that are performed by third parties that  
6 we hire to intentionally attack our systems, identify  
7 weaknesses, and attempt to gain access to our systems. And  
8 then we have many more technologies, too many to list here,  
9 but include email and network information monitoring,  
10 secure wireless, mobile device control, laptop security,  
11 segmented private networks, et cetera.

12                   As far as the actual technology servers that  
13 host the data, that have the data for Colorado as well as  
14 the data centers on which that equipment reside, our  
15 production servers have enhanced security, which is often  
16 referred to as hardening of the devices, to the industry  
17 best practices for security. Each of those devices is  
18 audited regularly to verify that the operating system and  
19 software components are kept current with updates and  
20 security and configuration standards. And our applications  
21 in production are continuously scanned by a third party for  
22 security vulnerabilities.

23                   Our data centers are all U.S.-based with  
24 multiple levels of physical security, so no data resides  
25 outside of the United States. And at those data centers



1 they have multiple levels of physical control. A few  
2 listed here are restricted access which is controlled by ID  
3 card systems, which permit access to the hardware; closed-  
4 circuit television systems monitoring access and viewing by  
5 facility security guards and staff; and then all physical  
6 security controls meet the security requirements as  
7 described in the contract.

8           And then, finally, in the unlikely event of  
9 a disaster, we have a recovery process that's based on ISO  
10 2301 standards.

11           And then to address concerns about the  
12 technology as well as the people within Pearson that have  
13 access to student data, our technology system components  
14 can only access specific student data as needed to complete  
15 their function. So, for example, the test delivery system,  
16 TestNav, has no access to student personally identifiable  
17 information. So this helps minimize the risk of sensitive  
18 data being compromised in the unlikely event of a  
19 particular component being penetrated.

20           Our system logging enables forensic analysis  
21 on accesses and changes to student data. So we know how  
22 data was modified, either manually or in an automated means  
23 by a system that can track that. And we track all extracts  
24 from student data from our repositories.

25 Only authorized, U.S.-based individuals have access to



1 student data and on a need-to-know basis. And that  
2 includes, most importantly, our specific staff assigned to  
3 work on the specific program. So that's program team,  
4 technology folks, our psychometrics staff, and tech writers  
5 who are helping clarify the administration for the test  
6 administrators.

7                   Then our call center. We have what we  
8 consider "Level 2" technical support, and those staff help  
9 administrators with more detailed technical issues that  
10 they are having. So they need to be able to see exactly  
11 what a test administrator is seeing on their screens in  
12 order to help resolve any issues that they may be  
13 encountering.

14                   At a more detailed level, if we have an  
15 issue with a product, technology component in the  
16 production environment, there are support staff to research  
17 specific data issues. They generally have no access to  
18 student identity data, only to specific information that  
19 that component technology uses.

20                   And then, finally, our operations staff that  
21 handle any paper materials, such as printing up reports,  
22 packaging, and scanning of the 1 percent of the test that  
23 we do receive via paper.

24                   On Colorado's staff, we've outlined who has  
25 access on this slide. The Department of Education defines



1 specific user roles for accessing student data within  
2 PearsonAccess, which is our online system for managing the  
3 test administration.

4                   Comprehensive student data is only  
5 accessible by specific individuals responsible for the  
6 overall assessment and enrollment at their respective  
7 organizational levels. So some of the roles that are  
8 defined within the system are the district assessment  
9 coordinator. They have access to all data, and those  
10 district assessment coordinators are assigned by CDE.

11                   Those that have the role of student  
12 enrollment or have a sensitive data add-on role, that is  
13 access to sensitive data such as race and ethnicity; the  
14 school assessment coordinator, which has access to identity  
15 data but not sensitive student data, unless also assigned  
16 student enrollment role or the sensitive data add-on; as  
17 well as the test administrator, who needs to access the  
18 student identity data, but not sensitive data unless they  
19 have the student enrollment role.

20                   MR. SHERWOOD: Madam Chair, for the purposes  
21 of kind of putting a bookend on where we started and the  
22 details that Randy just went back over, I was going to  
23 reiterate the statements that I'd made earlier around the  
24 summary of our guidelines and contractual requirements  
25 around the data collection.



1                   Again, Pearson is a contractor to the State  
2 of Colorado and abides by the requirements of that  
3 contract. The student information from the Colorado state  
4 assessments is the property of the state. It is not owned  
5 by Pearson and cannot be used by Pearson in any manner not  
6 authorized by the state. Student data security and privacy  
7 is foremost in our execution of the contract. Our  
8 policies, our systems, our processes, our controls and  
9 monitoring are designed to protect the unauthorized use of  
10 student data.

11                   We continually collaborate with all of our  
12 state customers to refine and improve any process or policy  
13 related to student information security and privacy. We do  
14 not share any student information used in our assessment  
15 programs unless authorized or requested by the state. We  
16 do not share state assessment information within Pearson or  
17 its partners for the purposes of product development or  
18 marketing. And we do not sell any state assessment student  
19 information to anyone.

20                   MS. ZURKOWSKI: Madam Chair, at this time we  
21 would like to open it up to Board questions related to our  
22 CMAS data collection under our contract with Pearson.

23                   MADAM CHAIR: Board, any questions you'd  
24 like to address? Jane.

25                   MS. GOFF: Thank you. This is very



1 technical and I'm not real sure, as far as specifically to  
2 the social studies and science tests. If a student reports  
3 an experience of being locked out or shut out or come down  
4 -- and I was particularly interested, when I read the  
5 phrase about a save or a re-enter function -- if a student  
6 says that they have had the experience where they're unable  
7 to get back in to complete, what does that look like for  
8 them? And where would they know? Where would the student,  
9 in particular, know, should know how to get back in so that  
10 there's not a stress of not being able to finish a test.  
11 What does that look like.

12 MR. SHERWOOD: I think it's Randy's.

13 MS. ZURKOWSKI: Madam Chair. I'm going to  
14 jump in there first and then I'll let Randy finish, because  
15 some of this is state policy issues, so I just wanted to  
16 address the state policy pieces first.

17 So when a student is testing and they may  
18 engage in a technology challenge, it is important to note  
19 that the system all along is saving the responses. So if  
20 there's suddenly like a major network breakdown, this kiddo  
21 does not need to restart from the beginning. Those  
22 responses are captured along the way.

23 The student is directed that if they  
24 encounter any issues during the testing that they signal  
25 that to the test administrator. The test administrator,





1 different than what we've had in the past -- historically,  
2 all issues with testing had to go from the test  
3 administrator to the school assessment coordinator, from  
4 the school assessment coordinator to the district  
5 assessment coordinator, and then from the district  
6 assessment coordinator to the vendor or to CDE. Because of  
7 this online testing there are shortcuts that have been  
8 implemented, so our test administrators have more direct  
9 contact with our vendor to get that technology help as  
10 quickly as possible.

11                   And with that I'll pass it a little bit off  
12 to Randy, in terms of how would a kid get re-entered?

13                   MR. SCHUESSLER: Thanks, Joyce, for handling  
14 the state policy issues.

15                   So the calls then would come back to us and  
16 we would, in our system, then reset that student for re-  
17 entry through our Level 2 support.

18                   MS. GOFF: Okay.

19 MR. SCHUESSLER: So a call through the school assessment  
20 coordinator.

21                   MS. ZURKOWSKI: Madam Chair.

22                   MADAM CHAIR: Yes.

23                   MS. ZURKOWSKI: So in many cases the issue  
24 can get resolved relatively quickly. There have been some  
25 cases, as we've gone through some of our field testing and



1 some of our other operational testing, that, frankly, it  
2 takes longer to resolve those issues. That student is  
3 allowed, from a state perspective, to go back in and finish  
4 that testing at a time convenient to the student, based on  
5 school and district decision. So the student is not  
6 penalized in terms of that timing of the test, based on  
7 that experience.

8 MS. GOFF: Okay. Thank you.

9 MADAM CHAIR: And just to follow up on that,  
10 so if they reset, might there be any delay in that reset  
11 that you're talking about?

12 MR. SCHUESSLER: No. That can be done  
13 within a matter of minutes through our Level 2 technology  
14 support, upon receiving the request.

15 MADAM CHAIR: Thank you. Any other  
16 questions, Board? Deb.

17 MS. SCHEFFEL: Thank you for the  
18 presentation. Such a great opportunity to talk about this  
19 with the public and with our Board. Such an essential  
20 question, as you know, there's been a lot of angst in  
21 Colorado and other states. So as in most presentations  
22 like this, great information, but we're always asking what  
23 was said; what was not said.

24 So there has to be a reason for the public  
25 angst, and I'd like your opinion on where that's coming



1 from. Is it merely that there wasn't enough preliminary  
2 work with the public done to really explain these data --  
3 where they are, how they're encrypted, how they're  
4 protected, are they not protected? Is this a public  
5 relations issue merely, or are there real concerns inside  
6 of how these data are stored, what they're used for, that  
7 were not addressed in your PowerPoint, which was quite  
8 detailed. And most of us are not data security experts so  
9 we're looking at these acronyms, and it's helpful in  
10 general, but there's a lot of detail here and it's a very  
11 complex area.

12                   So my question has to do generally with,  
13 where did we go wrong here? I mean, we are a small Board  
14 and we represent hundreds of thousands of kids and their  
15 parents, and obviously there's a lot of public angst, not  
16 in Colorado but all around the nation. Where did we go  
17 wrong here in terms of really trying to unpack this issue  
18 before the fact, as opposed to chasing it at this time?  
19 That's kind of a conceptual question.

20                   A detailed question is about algorithms.  
21 And so my question is, who actually sees the live data, so  
22 internally and externally. And I think you've addressed it  
23 somewhat, but again, the public is concerned with not just  
24 the words that are on these slides, but what algorithms are  
25 situated within the protections that you've delineated?



1 And how do they result in individuals seeing the data,  
2 internal and external to the system? And you may have  
3 addressed it but the words are not jumping off the page at  
4 me.

5                   For example, there's a lot of concern in the  
6 public that there are algorithms that do detect emotion,  
7 affect, behavior, keystroke speed, focus, biographics,  
8 biometrics, interests. Are these things just falling out  
9 of the air? Are people just coming up with these ideas  
10 because they're paranoid about data, or is there truth to  
11 the fact that there are algorithms that do surface,  
12 indirectly, these kinds of behaviors, that parents do not  
13 want associated with their children?

14                   So that's kind of a long question, but  
15 perhaps you could address the global issue and then the  
16 detailed algorithms, and who sees the data internally and  
17 externally?

18                   MADAM CHAIR: Simple question, right?

19                   MR. SHERWOOD: Madam Chair.

20                   MADAM CHAIR: Yes.

21                   MR. SHERWOOD: I'll take a first kind of  
22 stab at addressing I think public concerns. And, you know,  
23 as a parent school-aged children who take state assessments  
24 I certainly appreciate the fact that there would be  
25 concerns about how data is collected and handled and



1 managed, and I would expect that there are very stringent  
2 safeguard and security measures in place.

3           And really, though, trying to understand  
4 exactly what all those provisions are and the details  
5 around them is extremely challenging, not only for someone  
6 who works within the industry, but I can imagine it would  
7 be rather daunting to understand, from a parent point of  
8 view or perspective, when we think about the actual  
9 contractual requirements that we have with Colorado, and  
10 this is similar to our other state contracts, there are  
11 literally over 1,000 pages of contractual requirements,  
12 many of which address security requirements. And so to be  
13 able to try and capture that in a setting like this and  
14 articulate that with just a few slides is a challenge.

15           But parents don't have access to that,  
16 typically. We don't typically do a presentation like this  
17 or provide this kind of information. Obviously we're happy  
18 to do so and I think it helps, I think, address and  
19 alleviate, hopefully, some of the concerns about what are  
20 practices around data collection, certainly in Colorado and  
21 under the contract with Colorado.

22           It's always a challenge to get meaningful  
23 information at the right level and detail out to parents,  
24 not just about data security but how you report results and  
25 experiences around what's covered on the test. Anything



1 and all things associated, I think, with student assessment  
2 program are challenged around communication. It's a very  
3 challenging environment in which to send out information  
4 and to engage parents in a meaningful level at the detail  
5 that makes sense and addresses concerns. So I think a  
6 forum like this is important to try and get that  
7 information out.

8 MS. SCHEFFEL: And may I talk directly back  
9 or do I --

10 MADAM CHAIR: I think -- didn't Randy have  
11 something to add to that?

12 MS. SCHEFFEL: I'd love to hear the rest of  
13 the answer but I just had a quick comment on what this  
14 gentleman said.

15 MADAM CHAIR: That's all right. What I was  
16 -- I thought he had something to respond.

17 MS. SCHEFFEL: Oh, he may, yeah.

18 MADAM CHAIR: Was I right?

19 MR. SCHUESSLER: It's on the algorithm  
20 piece, of course.

21 MS. SCHEFFEL: Yeah. I just wanted to  
22 respond to Walter. Can I do that?

23 MADAM CHAIR: You want to respond to him  
24 first?

25 MS. SCHEFFEL: Just real quickly



1 MADAM CHAIR: Okay. Go ahead.

2 MS. SCHEFFEL: Okay. So my point is I've  
3 pulled up the contract. It's extremely detailed, very  
4 technical, and there's no way a parent would understand it.  
5 I barely understand it. Most of it don't understand it.  
6 But I do know what parents want to know, and I think you do  
7 too, which is, in an age where, as you pointed out, Anthem,  
8 Home Depot -- or I guess as the parent question pointed out  
9 -- Chase, Target -- these are huge corporations as well.  
10 They've encrypted their data as well. They have a huge  
11 stake in not allowing personal information of their  
12 customers to escape, right? But the information has  
13 escaped and we all see it in the media. And so parents are  
14 concerned about this.

15 So I think to the extent that we can look at  
16 this question deeply and address parents' questions in  
17 parent-friendly and layperson-friendly language, we have to  
18 do it. We have to do it as a Board, in venues like this,  
19 and I'm concerned that even these slides are a little over  
20 the heads of many of us.

21 So I appreciate you coming and I hope that  
22 we can really distill this information down, not just in  
23 what is said but what is not said. Where are the concerns  
24 coming from? How could we prevent something like this  
25 occurring, that has occurred with many other very robust



1 corporations? So thank you for that statement.

2 Now if you could address the algorithm  
3 piece.

4 MADAM CHAIR: Yes. Go ahead.

5 MR. SCHUESSLER: So as far as algorithms are  
6 concerned, I think we see, in the general public sector,  
7 that algorithms are continuously being developed to either  
8 improve sales, on patterns of usage and behavior, as well  
9 as in our national security sector, to identify threats for  
10 national security. Those algorithms, though, are not  
11 incorporated. We make no attempt to incorporate any types  
12 of algorithms into our systems, for further data mining or  
13 data analysis of usage behaviors with our systems.

14 So we do not do anything to try to detect  
15 emotional or biographic or psychological traits on  
16 students. We simply collect assessment data for the  
17 purposes of state and federal reporting.

18 MS. SCHEFFEL: May I follow up?

19 MADAM CHAIR: Yes.

20 MS. SCHEFFEL: Why is that out there? Why  
21 are parents concerned about that? I mean, apparently, at a  
22 conference where Pearson was presenting there was a  
23 presentation on identifying emotional states using  
24 keystroke dynamics, and you're saying that you collect data  
25 on changed responses. Well, parents are concerned about





1 how data is being used to surmise what a child is thinking.  
2 You could see why that would be a problem for any parent,  
3 right? I mean, that's why they're concerned.

4                   Where have these data -- where do these  
5 concerns come from?

6                   MR. SCHUESSLER: Madam Chair. I can't speak  
7 for the general population at large but I can tell you, as  
8 a father of two children in K-12, I would have some of the  
9 same concerns, and that's why I'm here to speak today to  
10 tell you definitively what we do with the data and to clear  
11 up any misconceptions that may exist with how we use -- how  
12 we collect the student data, what we do with that, which is  
13 only for state and federal reporting.

14                   MS. SCHEFFEL: Can you use different  
15 algorithms over time? In other words, you're stating  
16 today, at a point in time we do not use algorithms to  
17 collect affective behavior, keystroke information, speed of  
18 response. You do collect speed of response, is that right?

19                   MR. SCHUESSLER: Madam Chair. Our work is  
20 described in our contracts with our customers such as the  
21 State of Colorado. We perform no additional work outside  
22 of that contract in order to service the contractual  
23 requirement.

24                   MS. SCHEFFEL: So is there a page number --  
25 I mean, I've looked at the contract; it's overwhelming --



1 that says these are the algorithms that we could use, maybe  
2 not be using them today, could use to identify certain  
3 types of data that would help us? I mean, I know what  
4 you're trying to surmise, is why a child fails an item, or  
5 why he or she passes an item. So, I mean, that would be  
6 the argument from Pearson's perspective, that could be  
7 helpful educationally. If you see a child hovering over an  
8 item and they end up answering it incorrectly or correctly,  
9 I suppose the concept would be where is the dissonance,  
10 cognitively, that results in them hovering over an item. I  
11 get that.

12 But parents are concerned with how else that  
13 could be used, or what other algorithms could be brought to  
14 bear, legally? Can you point to a page number or  
15 something? I'm struggling to look at that detail.

16 MR. SHERWOOD: Madam Chair.

17 MADAM CHAIR: Oh, sorry, Mr. Sherwood.

18 MR. SHERWOOD: I think we could follow up  
19 with you with that. In fact, I think we could pull that  
20 right now, sitting here.

21 I think in terms of, you know, how parents  
22 might construe or not understand exactly how or in the ways  
23 in which the data is collected and the algorithms that  
24 exist within the student assessment contract, I think  
25 people in general have a tendency to kind of generalize



1 information across areas that may or may not be related,  
2 and that there is an understanding that, you know, some  
3 fields, some companies do that kind of thing, and so they  
4 might associate any online activity or data collection  
5 efforts to be, you know, part of that group that does  
6 things like that. Specifically to the student assessment  
7 contract, we don't collect that kind of information, nor  
8 would we.

9 MS. SCHEFFEL: Okay. Well, I have further  
10 questions but I'll yield to my colleagues.

11 MS. FLORES: I have a question.

12 MADAM CHAIR: Yes. Go ahead.

13 MS. FLORES: Thank you, Madam Chair. I  
14 would like to ask about the -- and it could be dealing with  
15 algorithms, but I don't know -- whether machines are going  
16 to be grading this.

17 MADAM CHAIR: A what?

18 MS. FLORES: Machine.

19 MADAM CHAIR: Can do what?

20 MS. FLORES: Machines are grading the test,  
21 and, thereby -- I have read several articles where machines  
22 scan. They look for certain data, you know, words, like  
23 whether they use a framework, such as whether they use the  
24 sentence again that was asked the question, certain words  
25 that in response. And one particular researcher looked at



1 whether -- and he did this, and gave just spot words that  
2 were important to this, to the answer, but was basically  
3 gobbledy-gook, and really scored high on responses such as  
4 this.

5                   So -- and this is not humans. I mean,  
6 you're going to be paying people \$15 an hour. These are  
7 not people that are, you know, really know their subject.  
8 People -- \$15 an hour is not a professional, as far as I'm  
9 concerned. But this is what you're going to be paying  
10 people to read these questions. And I know the speed at  
11 which people will have to read. I've seen people doing  
12 this, and I kind of wonder whether -- that's another  
13 question.

14                   Does the public really think that a machine,  
15 and does the public really think that, or parents out there  
16 think that a machine should be scoring, you know, the  
17 tests, or whether low-paid people who are not really  
18 professionals, that you maybe pick off the street, who  
19 would do this, can actually look at the items responded by  
20 your children, and this will be a valid way to do it, to  
21 grade papers? I don't think so. Can you tell me that --  
22 can you give any information to further my concerns and  
23 fears about what I read and I've seen?

24                   MS. ZURKOWSKI: Madam Chair.

25                   MADAM CHAIR: Yes.



1 MS. ZURKOWSKI: If I may, I think I'm  
2 hearing two separate questions from you. One is will  
3 Colorado be utilizing what were referred to as artificial  
4 intelligence to complete some of our scoring? I think your  
5 second questions really relates to how do we ensure that  
6 the scoring that is done on our open responses by humans is  
7 reliable scoring.

8 MS. FLORES: That's right.

9 MS. ZURKOWSKI: Both of those are very, very  
10 important questions. I'm going to ask the Chair, given  
11 that they are kind of outside of the purview of the data  
12 security, data privacy, whether you want us to hold off on  
13 that question, obviously provide a response, or whether you  
14 want us to digress, at this point, and go on a sidebar.

15 MS. FLORES: See, I didn't know whether  
16 Pearson people were going to be back again.

17 MADAM CHAIR: I think Joyce's question is a  
18 good one, and actually, I would prefer that you respond to  
19 her separately, and, as you said, later, because I think  
20 it's a little out of the purview of the rest of the  
21 discussion.

22 And I usually wait until everybody, but I  
23 just have a question I wanted to ask, and that is this aura  
24 of distrust. It's, you know, prevailing. People don't  
25 trust you and they don't trust us. And has there ever been



1 an incident in Pearson. Have you have incidents where  
2 people did do something wrong? You know, scores got  
3 released or any of these sort of things that people think  
4 happened. Do you have any examples of things where you  
5 have gone wrong, or where people really have had real, you  
6 know, questions that you needed to answer?

7 MR. SHERWOOD: Madam Chair.

8 MADAM CHAIR: Yeah.

9 MR. SHERWOOD: Not to my knowledge, we have  
10 not had a data security or a data privacy breach, although  
11 we do have very strict provisions within the contract with  
12 Colorado and all of our states for a remedy in the event  
13 that that would happen, and the requirements for  
14 notification and possible, you know, breach of contract are  
15 provisions that are in there. But I'm not aware, and I can  
16 go back and make sure that I'm answering that correctly.

17 MADAM CHAIR: Is this just an era of  
18 distrust of large corporations?

19 MR. SHERWOOD: I think it's fair, given the  
20 track record of corporations and their ability to safeguard  
21 data, that people would have questions or concerns about,  
22 you know, how well or not you're managing --

23 MADAM CHAIR: No, I understand their  
24 concerns. I was just wondering if we had any real incidents  
25 to report back on that, and your company, at this point,



1 has no examples of any place where data was used  
2 incorrectly or released to the wrong people, or any of  
3 those sort of things? No?

4 MR. SHERWOOD: First, let me back up a  
5 little bit. So we have not had any major security breaches  
6 or issues around that. On occasion we have misreported or  
7 sent reports to the wrong school, or to, you know, the  
8 wrong students. So at times we have, you know, had  
9 security breaches in terms of our reporting, getting sent  
10 back to the wrong places.

11 MADAM CHAIR: All right. Thank you for that  
12 that.

13 Did you have a question, Angelika?

14 MS. SCHROEDER: I do. With your permission  
15 I'd like to continue on Deb Scheffel's conversation. I  
16 want to bring it down to the experience that we have, if I  
17 decide that I want to buy some sleds for my grandson, and I  
18 go online and order, or don't order, just going online,  
19 looking for them.

20 The next time I go online for anything else  
21 the advertisement pops up -- and I don't know if that's  
22 called an algorithm. I kind of want to bring it down to  
23 where we think parents are worried, and that is that it  
24 feels like somebody is somewhere -- is in my office with  
25 me. They're still working on me. I guess I haven't



1 ordered the sleds.

2                   So who is this, and what are they seeing? I  
3 think it's that anxiety. It not just the breaches at the  
4 stores, et cetera. I think it's this eerie, Big Brother  
5 feeling that you get when you have that. And I don't know  
6 how to say that in a contract, that our parents were going  
7 online and looking at our -- in other words, is there a way  
8 to explain what's in your contract in a way that reflects  
9 the world we live in right now online, ourselves? That's  
10 why we worry about our kids, because if they're watching  
11 me, if they're figuring out exactly -- and they do know  
12 where I spend my online money, or what my interests are,  
13 assure our parents that you're not -- that's not what  
14 you're doing.

15                   MADAM CHAIR: Yes. Go ahead.

16                   MR. SCHUESSLER: Madam Chair.

17                   MADAM CHAIR: Take a stab.

18                   MR. SCHUESSLER: Certainly those  
19 technologies exist, as I said earlier. They're used in the  
20 private sector. We make no application of those  
21 technologies in our statewide assessment business.

22                   MS. SCHROEDER: Okay. So what I think I'm  
23 saying is that somewhere in the contract, English,  
24 examples.

25                   So we were lucky enough to have a property





1 that we rented to somebody else, and we had a rental  
2 agreement and a contract. Despite the fact that there is a  
3 lawyer in the family, we actually decided to put it in  
4 English, so that our tenant really knew exactly what his or  
5 her rights were and what we expected.

6                   And I get the fact that you've got mega  
7 contracts, that you've got the legal beagles all over the  
8 place, but is it possible to also have a section that talks  
9 about the world that we're living in, knowing that these  
10 things are out there, and these are the things that you are  
11 not doing, and these are the things that you are doing, in  
12 plain old English? I mean, I know what an algorithm is but  
13 I didn't think that was necessarily helpful for everyone  
14 who is listening to us today, because there are plenty of  
15 folks who actually didn't even -- I don't think even  
16 understood at that level. Thank you.

17                   MADAM CHAIR: A question or a statement?

18                   UNIDENTIFIED VOICE: Well, in a way it's a  
19 statement but it's a request. And I think what you're  
20 asking is could we -- that's what I'm saying. Is there a  
21 page somewhere? I mean, all these popcorn questions from  
22 the public, and they're great questions, right? Is a  
23 child's location tracked when he or she is taking a test?  
24 If I'm a parent, I don't want that, not because I don't --  
25 I don't care that the test knows they're in their school



1 taking the test. I care that somehow my kid is being  
2 tracked. I don't want that. Is that somehow protected?

3 I don't know what a simple, common-language  
4 list of data points is. Is there a list somewhere? I  
5 don't know how algorithms, or formulas, or whatever we want  
6 to call them, that are inside our servers, as adults,  
7 whenever we do a search, are captured in perpetuity. I  
8 don't know if that's happening for my child, and if it  
9 isn't, what are you doing to make sure that it never  
10 happens? Maybe it's not happening today but is it  
11 somewhere in a cloud somewhere where somebody's going to  
12 buy it later? As a parent, I have no assurances of any of  
13 these things, and those are the things, even as adults, we  
14 care about, right?

15 Every time I get on the computer I think,  
16 really, every click, every Web search, every -- it's all  
17 historically captured somewhere. I can't imagine who cares  
18 about it. Advertisers care about it, so parents care about  
19 it. Is there a way to render this friendly to the public?  
20 And again, I defer to my Board members for other questions.

21 MADAM CHAIR: Yes, Joyce.

22 MS. ZURKOWSKI: Madam Chair, I'm going to  
23 suggest that, back to one of your original questions, which  
24 I think it was how are parents supposed to be able to  
25 access this information? How are they supposed to be able



1 to understand it? How are they supposed to be able to  
2 know, and why are they so concerned? I think we've  
3 addressed the issue of why they are concerned. What we  
4 haven't addressed is what could we have perhaps have done  
5 better? And I think it is having better communication  
6 directed at our parents.

7 I don't think we did as good of a job with  
8 that as we could have, and I think, with this forum, it's  
9 our first step to put together information that is parent-  
10 friendly, I think is a very fair request of the Board to  
11 make of us, so that they can understand again exactly what  
12 is collected and what is not collected, and try to  
13 specifically address their concerns.

14 Providing the public with the opportunity to  
15 ask their questions, last month, I think opened that door,  
16 but I would suggest we, as a Department, need to be  
17 answering the questions in a more parent-friendly way and  
18 trying to get the information out there. When parents have  
19 contacted us and we've been able to have conversations,  
20 very often, at the end of the conversation, the parent  
21 says, "Thank you. I now understand. I will move on with  
22 my day." But how do we do that at a large scale, and  
23 that's our challenge.

24 So I think it is fair for you to request of  
25 us to put some information together that we can try to



1 distribute, and we will look to the Board for help in terms  
2 of how to get that message out there.

3 MR. DURHAM: Thank you, Madam Chair. I  
4 think it's fair to say that we've all been put under a lot  
5 of pressure by what are considered to be problems with  
6 Pearson and your administration of the PARCC test, and an  
7 element of that is the data collection. I think probably  
8 you ought to hear that I'm certainly more than tired of  
9 trying to explain to people why this testing window appears  
10 interminable, why the test has to be divided in two parts,  
11 why the results are delayed. And I think it's not the  
12 place here but in context with data, those are problems you  
13 all need to remedy or our problems are going to get worse  
14 and, as a result, so are yours.

15 So let me say that I don't think these --  
16 all of the complaints and concerns about data collection  
17 have come, or have been created out of whole cloth. And  
18 there's plenty of evidence that -- or allegations that you  
19 do a lot more than you say you do. Do you do business with  
20 a company called Newton?

21 MADAM CHAIR: Pardon?

22 MR. DURHAM: Newton.

23 MADAM CHAIR: Newton?

24 MR. SHERWOOD: Madam Chair, yes, we do.

25 Newton is a company that provides an adaptive learning



1 engine that helps personalize instructional resources for  
2 students. That product is part of our -- it's a service  
3 that is sometimes associated with some of our MathXL  
4 products that are used primarily at higher education. The  
5 services that Newton provides, again, would be provided  
6 under contract with the -- either university or higher ed  
7 institution or school district that has requested and asked  
8 for those services.

9 MR. DURHAM: Let me, if I could, let me just  
10 read a few things that Newton has to say about you.

11 "We have a large publishing partnership with  
12 Pearson and they tag all their content, and we are an open  
13 standard so anyone can tag us. If you tag all your content  
14 and you do it down to the automatic concept level, down to  
15 the sentence, down to the clause, you unlock an incredible  
16 amount of trapped, hidden data."

17 So I guess the question that proceeds from  
18 that, what is it that you're giving Newton that they are  
19 able to use to unlock "an incredible amount of trapped,  
20 hidden data"?

21 MR. SHERWOOD: Again, I'm not -- Madam Chair  
22 -- I'm not extremely familiar with the Newton produce since  
23 that has really absolutely nothing to do with the student  
24 assessment program and nothing to do with the Colorado  
25 contract whatsoever. My understanding, though, at a very



1 high level, is that one of the services, one of the  
2 features of using those MathXL products is when a student  
3 is interacting with the product, with the instructional  
4 resources, they go in and they select responses or answers.  
5 Based on those responses, then, the Newton engine then  
6 helps drive what instructional resources or what happens  
7 next in terms of the experiences with students' learning.

8 My understanding is also that that  
9 information is completely de-identified and has no PII  
10 associated with it, but it's simply based on their  
11 algorithm that exists within the Newton product. It helps  
12 drive what is then sent next.

13 MR. DURHAM: Let me continue Newton's  
14 statement:

15 "So Newton students today, we have about  
16 180,000 right now. By December it will be 650,000. By  
17 early next year it will be in the millions, and the next  
18 year it will be closer to ten million, and that's just  
19 through our Pearson partnership. So every one of the  
20 students, we can figure out, within a few hours, what  
21 they're strong at and what they're weak at, at the  
22 beginning of the course."

23 MADAM CHAIR: Mr. Durham, could you give us  
24 all the source of that so we can look it up ourselves?

25 MR. DURHAM: Yeah. It's part of a video



1 that's posted online and I'll get that to you.

2 MADAM CHAIR: Okay. Thank you. Go ahead,  
3 whoever.

4 MR. SHERWOOD: I'm not sure I understand the  
5 question.

6 MADAM CHAIR: Was it a question?

7 MR. DURHAM: Well, do you want to deny that  
8 you provide Newton with any information that would allow  
9 them to do, with tens of millions of students, what they're  
10 describing? And it will get better if you want me to --  
11 let me know when you want me to continue.

12 MR. SHERWOOD: Sorry. What I'd said  
13 previously, Madam Chair, we don't share any students'  
14 personally identifying information with Newton.

15 MR. DURHAM: So, okay.

16 "Newton can figure out things like you learn  
17 math best in the morning between 8:40 and 9:13, you can  
18 learn science best in 42-minute bite sizes, and at the 42-  
19 minute mark you might click -- you might start missing  
20 questions you would normally get right. We literally know  
21 everything about you and how you learn best everything,  
22 because we have five orders of magnitude more data about  
23 you than Google has. We literally have more data about our  
24 students than any company has about anything else, and it's  
25 not even close."



1                   So your contract with Newton doesn't provide  
2 them any opportunity to match that scoring data with  
3 whatever data it is they're gathering through their  
4 contracts with, I presume, local governments. Is that your  
5 statement?

6                   MR. SHERWOOD: I can't speak to -- Madam  
7 Chair, I can't speak to the details within the contract  
8 between Newton and Pearson but I can certainly get that  
9 information for you.

10                  MADAM CHAIR: So can we not go too much  
11 longer if we're not going to get any more answers?

12                  MR. DURHAM: We've got another hour. We're  
13 in good shape.

14                  MADAM CHAIR: No. We need to have -- get  
15 out of here.

16                  MR. DURHAM: "We're really excited to  
17 correlate with other people's dataset about open API and  
18 things like that. Someone we've talked to, it's kind of a  
19 joke that it would work, but it's like a food diary. You  
20 tell us what you had for breakfast every morning at the  
21 beginning of the semester and by the end of the semester we  
22 should be able to tell you what you should have had for  
23 breakfast, because you always do better on the days when  
24 you had scrambled eggs."

25                  I think these are the fears that parents





1 have, and this particular commentary is at a White House  
2 conference, made by someone with whom you have a contract,  
3 who alleges that you supply them with information that  
4 helps get them to this point. So either they're puffing --  
5 I can't imagine a company would do that -- but either  
6 they're puffing or there's more in the relationship than at  
7 least you all have talked about to this point.

8                   Is it puffing or is there anything that we  
9 should know that you're sharing?

10                   MR. SHERWOOD: Madam Chair, I apologize.  
11 I'm not familiar enough with those statements made by  
12 Newton to really speak at length to them. What I am  
13 familiar with is the way in which Newton is or is not  
14 associated with the student assessment program in Colorado,  
15 and it's absolutely not. We can go back and look at more  
16 detailed contractual language between Pearson and Newton  
17 and I could get something back to you around that.

18                   MR. DURHAM: You would agree that statements  
19 like this being made that include you are not particularly  
20 helpful to solving the problems that we face on the issues  
21 of data security, data privacy, and I think what is the  
22 greater concern, about information being collected,  
23 accurately or otherwise, that follows a student to the end  
24 of the earth, or at least to the grave. And having watched  
25 some of the activities over at the Capitol here in the last



1 few days, I mean, one of the things that -- and I don't  
2 know whether you're involved in lobbying these activities  
3 or not, but it's quite clear that the data collection  
4 community will resist to the death any ideas they should  
5 ever have to delete or give up or stop collecting any data.  
6 So the fact that these statements are made can't do  
7 anything but harm your company.

8                   And let me put it in context of the one,  
9 page five of the presentation here, where the data you  
10 collect, it says is expelled. Is that data you have to  
11 collect? I mean, does somebody require you to collect  
12 whether or not a student has been expelled?

13                   MS. ZURKOWSKI: Madam Chair.

14                   MADAM CHAIR: Yes.

15                   MS. ZURKOWSKI: The status of a student  
16 being expelled has implications for reporting, yes.

17                   MR. DURHAM: So if they're expelled at the  
18 time of the test or if they've ever been expelled?

19                   MS. ZURKOWSKI: Madam Chair.

20                   MADAM CHAIR: Yes.

21                   MS. ZURKOWSKI: It is at the time of the  
22 test. So students who are expelled at the time of the  
23 test, those scores are not, I believe, attributed -- I was  
24 just looking to see if Dr. Owen was down there -- I believe  
25 it is not attributed to the school.



1 MADAM CHAIR: All right. Thank you.

2 MR. DURHAM: Could you comment on digital  
3 badges, and do you have any involvement with the concept of  
4 creating digital badges for students?

5 MR. SHERWOOD: Madam Chair.

6 MADAM CHAIR: Yes.

7 MR. SHERWOOD: No, I'm not familiar at all  
8 with that. We do not do anything with digital badges, to  
9 my knowledge.

10 MS. ZURKOWSKI: Madam Chair, for our program  
11 we do not do anything with digital badges.

12 MR. DURHAM: Predetermined career track  
13 sample from Pearson marketing video on digital badges.  
14 I'll give you a copy of that when we're done.

15 Would you have objection to a contract  
16 modification that in very plain English spelled out the  
17 data you could collect and prohibited the collection of any  
18 other data, including things like time between keystrokes -  
19 - I don't know. Apparently you can do that. I don't know  
20 if you do it. Time between keystrokes, how many times  
21 somebody goes back to look at an answer or to change their  
22 answer -- so that we could just get this test and the data  
23 collection back to name, rank, and service number as  
24 opposed to I don't know what anybody's interested in and  
25 how long it is between keystrokes, or how long it is



1 between questions. That doesn't seem to me to serve a  
2 useful purpose. Your job is to grade papers. So could you  
3 produce a contract, and would you be willing to enter into  
4 contract negotiations that would specify what you could, in  
5 plain English, collect, and then everything else is  
6 prohibited?

7 MR. SHERWOOD: Madam Chair.

8 MADAM CHAIR: Yes.

9 MR. SHERWOOD: Again, as we kind of walked  
10 through on those slides, the information that we collect  
11 under the student assessment program is the requirements  
12 set forth in our contract with Colorado.

13 MADAM CHAIR: Thank you.

14 MR. DURHAM: Well, all right. Then let me  
15 ask Joyce. Is there any reason why our contract with them  
16 has to include any more than name, rank and service number?

17 MS. ZURKOWSKI: Madam Chair.

18 MADAM CHAIR: Yes.

19 MS. ZURKOWSKI: Yes. So we are required to  
20 be able to report out on all of those other subgroups which  
21 we indicated. Some of the other information -- and I  
22 apologize. Things aren't scrolling right now.

23 MR. DURHAM: It's a data collection issue.

24 MS. ZURKOWSKI: Technology. Some of the  
25 other information that we collect, that you referenced,



1 specifically like the time on an item, that actually  
2 becomes relevant in terms of us selecting items that we're  
3 going to utilize in the future. So we may have an item  
4 that we think students should take about a minute and a  
5 half on, and that's our estimate, and then we find out that  
6 once a student has actually experienced the item it takes  
7 them ten minutes. We're not going to utilize that item  
8 again, right. Our estimation in terms of amount of effort  
9 it was going to take the kiddos to answer, it isn't serving  
10 us well. It's a poor-quality item. And so that's why that  
11 time on an item actually becomes relevant to us, in terms  
12 of building a reliable and valid assessment.

13 MADAM CHAIR: Thank you.

14 MS. MAZANEC: Madam Chair, a follow-on.

15 MR. DURHAM: I'll yield to --

16 MADAM CHAIR: Pam's got a question and she's  
17 not been able to speak yet.

18 MS. MAZANEC: I just had a question relevant  
19 to Mr. Durham's question.

20 MADAM CHAIR: Pam, you had a question?

21 MS. MAZANEC: Well, relevant to what he was  
22 saying, Steve was saying, is you do collect their IP  
23 address, right, and the location of their device. Did you  
24 -- don't you? And why is that -- and is that --

25 MR. SHERWOOD: We collect the network



1 address so we can ensure that -- so that we can make sure  
2 that the student was testing on a secure network, as well  
3 as in the school, and to identify any network issues that  
4 may be pervasive across that school, so we can identify  
5 location-specific problems with testing. But that's not  
6 used for any other purpose.

7 MS. MAZANEC: And the type of advice?

8 MR. SHERWOOD: The type of device. Those  
9 were outlined on the section 4 of the student data slides  
10 on page 11. So we collect the type of device, so was it a  
11 laptop, was it an iPad, a Chromebook, you know, which  
12 browser they were using underlying that and the operating  
13 system. And that's needed to also troubleshoot problems  
14 that may exist with a specific type of device. That's  
15 purely what that is used for. And these are school assets.  
16 These are personal assets of the students.

17 MS. MAZANEC: Thank you.

18 MADAM CHAIR: Deb, I just wanted to remind  
19 the Board we've only got 45 minutes left in this session,  
20 so if we can get to the audience questions we need to wrap  
21 it up. One question.

22 MS. SCHEFFEL: So, again, thank you for your  
23 patience with all these questions. I think one of our  
24 challenges is we've heard what's been said. We're  
25 struggling with what's not been said. So, for example, in



1 our contract with PARCC we know at the Federal Government  
2 owns the data. In other words, they have access, by  
3 contract, to the data. So why would someone in a district  
4 in a rural area say that the schools have to take the  
5 master chip out of the computer and seal it in a  
6 confidential envelope provided by Pearson, and mail it in?  
7 I mean, what happens with a report like that?

8 MADAM CHAIR: Good question.

9 MS. SCHEFFEL: I mean, are you saying that  
10 the data is not shared with the feds? Of course it's  
11 shared with the USDE.

12 MS. ZURKOWSKI: Madam Chair, so in terms of  
13 the results that are collected, the Federal Government does  
14 get aggregated results. That has been the case, frankly,  
15 for a lot of years. So aggregated information does go back  
16 to the Federal Government. What does not go to the Federal  
17 Government is the individual student-level data. And the  
18 data that is collected on our students under this contract  
19 is owned by Colorado.

20 MS. SCHEFFEL: And can the Federal  
21 Government disaggregate it? In other words, you're saying  
22 right now they take what we send them, which is  
23 disaggregated, and they reaggregate it. Can they at some  
24 point disaggregate it? I mean, we're looking at present  
25 tense functionalities of the data that may not be exploited



1 now but could be exploited later. Can you speak to that?

2 MADAM CHAIR: Yes.

3 MS. ZURKOWSKI: Madam Chair, so we -- again,  
4 under our federal requirements we do do reporting at an  
5 aggregate level. Is there opportunity for discussion in  
6 terms of how that is aggregated, what exactly is delivered?  
7 I think that's fair. We have certain rules for what it is  
8 that we report out publicly, in terms of like minimum N  
9 size, also looking at subgroups and trying to figure out,  
10 you know, by default, can somebody figure out how a  
11 particular kid did?

12 I think those conversations are deepening,  
13 but again, at this point, in terms of a Pearson issue,  
14 that's not a Pearson issue. That is a Colorado and a  
15 federal Department of Education conversation that we may  
16 want to have. But again, they do not get the individual  
17 student-level data.

18 MS. SCHEFFEL: Right, but you can see where  
19 this becomes a slippery discussion, right, because I think  
20 Pearson is talking about the protections that are built  
21 into their system, but they only use the data for a time,  
22 where they collect it in a certain way, and then it's  
23 shipped off to the feds, and what does the Federal  
24 Government do with it, and what protections do parents --  
25 what is in place with how that data gets disaggregated or





1 used now and in the future? That's why there's such  
2 concern over this. There are so many multiple moving  
3 pieces that one discussion, because there are so many  
4 tentacles, really doesn't capture the big picture of where  
5 these data go, how they're used, and protections of  
6 privacy.

7 MS. ZURKOWSKI: Madam Chair, I absolutely  
8 agree with you that there are a lot of issues that are  
9 getting conflated --

10 MS. SCHEFFEL: Yes.

11 MS. ZURKOWSKI: -- and there are a lot of  
12 legitimate concerns. One thing that I would like to point  
13 out is Pearson does not have pass off data to the Federal  
14 Government.

15 MS. SCHEFFEL: The state does.

16 MS. ZURKOWSKI: Colorado passes off data to  
17 the Federal Government.

18 MS. SCHEFFEL: It's the same.

19 MS. ZURKOWSKI: But it's not the same. What  
20 I'm saying is, is that in terms of this conversation, in  
21 terms of what Pearson is doing, I just want to make clear,  
22 this is not a Pearson issue. This is a state issue with  
23 the Federal Government, and I just want to direct it in  
24 that direction, as opposed to getting it confused with the  
25 Pearson contract.



1 MS. SCHEFFEL: You see, I appreciate that,  
2 but you can see why, for parents and the public who are the  
3 main recipients of this work, it's very frustrating,  
4 because they try to ask a question and there's a semantic  
5 answer with a nuance that suggests they're asking the wrong  
6 question, you know, straining at a gnat, in a sense, and I  
7 understand that Pearson is one of the players, the state is  
8 another player, other vendors are other players, and they  
9 all have dependencies that are not fully fleshed out or  
10 made transparent to the public. This is inordinately  
11 frustrating for the public.

12 I would go back to Mr. Durham's request that  
13 we map this out, in great clarity, for the public, and I  
14 think that it would serve us all well if we could figure  
15 that out, because those are the frustrations -- that's why  
16 we have this hearing. That's why we have hundreds of  
17 emails from frustrated parents, desperately trying to  
18 figure out, well, if that's not the right question, what is  
19 the right question?

20 MS. ZURKOWSKI: Madam Chair.

21 MADAM CHAIR: Yes.

22 MS. ZURKOWSKI: And I am also looking at  
23 Commissioner Hammond here. I think, again, in terms of how  
24 data is used by the Department, where the data goes, that  
25 is a really, really important question for us to address.



1 I think the Department has taken steps, especially within  
2 the last year, to attempt to become more transparent with  
3 where the data lies, and where it goes. There is  
4 information that is posted on the Web. I understand that  
5 we may need to make that even clearer. That's work for the  
6 Department.

7 MS. SCHEFFEL: I would encourage us to  
8 engage parents in writing a document. They know exactly  
9 the questions they want answered. And every time we  
10 generate a document, many of us read it and think, for some  
11 reason the answer is not apparent. So I agree and I'd like  
12 to engage parents in writing it, and get their input,  
13 pervasively.

14 MADAM CHAIR: All right. Thank you. Joyce,  
15 we now seem to turn to the questions from the audience, and  
16 I notice in my script it says "I will read them." I think  
17 you meant, were you going to read them.

18 MS. ZURKOWSKI: I think the intent was that  
19 you would do the reading, but obviously that's open for you  
20 to make a decision about.

21 MADAM CHAIR: And I don't care. I can read  
22 them. I hadn't seen any so I didn't want to be unprepared  
23 for this part. They're picking them up now.

24 MS. SCHROEDER: So let me make my comment.

25 May I?



1 MADAM CHAIR: Yeah. Angelika is going to  
2 make a quick comment.

3 MS. SCHROEDER: In relationship to what Deb  
4 just said, it really doesn't matter whether we read  
5 something and understand it, because we may say this is  
6 very clear to us. So I agree with you to have just sort of  
7 run this past folks who are not engaged at our particular  
8 level, to sort of get a temperature of whether this makes  
9 sense to other folks. Because there are things that seem -  
10 - that I think we understand and others don't, and there  
11 are things that others understand that I'm not  
12 understanding either, like that technical stuff. Thank  
13 you.

14 MADAM CHAIR: I'm sorry. Did you answer her  
15 question?

16 MS. ZURKOWSKI: Madam Chair, I don't think  
17 it was a question. I think it was a statement.

18 MADAM CHAIR: All right.

19 MS. ZURKOWSKI: And it was very well heard.

20 MADAM CHAIR: Okay. Thank you.

21 MS. MAZANEC: Can I make one quick comment  
22 too?

23 MADAM CHAIR: Yes.

24 MS. MAZANEC: I think we talked about this  
25 probably over a year ago and I agree. I think we



1 suggested, over a year ago, that we need a page on the  
2 Department of Education website for parents. You guys  
3 know, you're hearing from us, you're hearing from them what  
4 their hot topics are, what their concerns are. There needs  
5 to be a page that speaks to parents in a language that  
6 makes sense to them, and one that makes sense to me too, as  
7 well. But we've been talking about that for over a year,  
8 so I really hope that we get busy on that. Because one of  
9 my concerns is data that is shared, authorized by the  
10 state. I want to revisit that, as well.

11 MADAM CHAIR: Thank you, Pam. Question.  
12 Did you want answer? Any comment? No?

13 MS. ZURKOWSKI: Not at this time, Madam  
14 Chair.

15 MADAM CHAIR: Okay. We can now address  
16 questions from the audience, submitted via note cards. I  
17 will read them in the order in which I received them. And  
18 any we are not able to address will be added to our list of  
19 questions and posted with responses on our webpage after we  
20 have had a chance to respond to them.

21 Please note that any that are not germane to  
22 the CMAS assessment data collection and privacy discussion  
23 today will be addressed through the Frequently Asked  
24 Questions that will be posted on our website.

25 All right, question number one -- and I've



1 not had a chance to read it in advance so I hope I don't  
2 stumble on it -- how many -- oh, we have a lot of questions  
3 -- how many attacks on your software have there been?

4 UNIDENTIFIED VOICE: I would have to go  
5 research that information.

6 MADAM CHAIR: Have there been attacks? Have  
7 any of their attacks been successful? That's all part of  
8 the same question. Have you had any successful hacks?

9 UNIDENTIFIED VOICE: Madam Chair, I'm not  
10 aware of successful hacks against our assessment systems.  
11 We have had denial-of-service attacks in the past and we  
12 improved our systems over time. We can respond with a  
13 complete list.

14 MADAM CHAIR: Okay.

15 UNIDENTIFIED VOICE: What's a denial-of-  
16 service attack?

17 UNIDENTIFIED VOICE: A denial-of-service  
18 attack is, you could think of it as -- in the physical  
19 world, if you had a store, and crowds were trying to get in  
20 the front door, nobody could get into the building. So in  
21 assessment, if there is a coordinated attack on our servers  
22 it could disrupt an assessment. But we have technology in  
23 place to thwart those types of attacks. And as I mentioned  
24 earlier, that type of attack occurred last week with  
25 another state assessment program, with another vendor. But



1 we take measures proactively to try to avoid those types of  
2 attacks on our systems for assessment.

3 MADAM CHAIR: Okay. Who is the third-party  
4 contractor who reviews and (indiscernible) your security?

5 UNIDENTIFIED VOICE: I will have to follow  
6 back up with that too.

7 MADAM CHAIR: Okay. We will answer any  
8 questions we don't answer today.

9 UNIDENTIFIED VOICE: Absolutely.

10 MADAM CHAIR: We will get them out there.

11 I can't read this last one. I'll look on  
12 the back. I should have had a chance to practice them.

13 What audits or supervision do you exercise  
14 on subcontractors, and how do you ensure that they're  
15 meeting your standards?

16 UNIDENTIFIED VOICE: Madam Chair, all of our  
17 subcontractors are subject to the same provisions as our  
18 contract is, and we hold our subcontractors to those  
19 provisions. The same type of audits that apply to us, we  
20 apply to them.

21 MADAM CHAIR: Okay.

22 MS. ZURKOWSKI: Madam Chair -- and I do just  
23 want to point out Slide 26 that is currently on the screen,  
24 that address subcontractor agreements, while you go ahead  
25 and read some more questions.



1                   MADAM CHAIR: And, by the way, if I run  
2 across the same questions that they've already answered I  
3 won't repeat the question. So if yours is the same as  
4 someone else it won't get read twice.

5                   The student data identity and registration,  
6 starred data is required. What additional optional data is  
7 provided by Pearson or CDE?

8                   MS. ZURKOWSKI: Madam Chair, I believe what  
9 is being referenced is the data indicated on Slide 10. So  
10 we did provide two fields that had an asterisk next to it,  
11 indicating that we had no testing (indiscernible) in school  
12 and we needed to know testing grade prior to the test being  
13 administered. The other fields, again, we need to have for  
14 reporting but we don't need to have at the start of the  
15 test. So schools and districts could choose to upload that  
16 information actually after testing is completed.

17                  MADAM CHAIR: Who are the partners that  
18 participate with you? I'm sorry. I mean, I assume that  
19 Mr. Durham asked a question that they are considering  
20 themselves to be a partner.

21                  MR. SHERWOOD: Madam Chair, I think we'll  
22 answer that in the context of the student assessment  
23 program in Colorado.

24                  UNIDENTIFIED VOICE: Madam Chair.

25                  MADAM CHAIR: Yes.





1 UNIDENTIFIED VOICE: Pearson does have some  
2 partners on the PARCC component of the contract, and those  
3 include ETS, a company called Measured Progress.

4 MADAM CHAIR: I didn't hear that word.

5 UNIDENTIFIED VOICE: A company called  
6 Measured Progress.

7 MADAM CHAIR: Measured Progress.

8 UNIDENTIFIED VOICE: And ETS. Those are two  
9 I am aware of. The science and social studies components  
10 we have no subcontractors.

11 MADAM CHAIR: Okay.

12 MS. ZURKOWSKI: Madam Chair.

13 MADAM CHAIR: Yes.

14 MS. ZURKOWSKI: For purposes of clarity  
15 there is also, for PARCC, a subcontract with HumRRO that is  
16 doing some validity work for the assessment. Again, for  
17 the sake of transparency there is that third.

18 MADAM CHAIR: Okay.

19 UNIDENTIFIED VOICE: Excuse me. Was that  
20 first answer TS -- TS GOLD?

21 UNIDENTIFIED VOICE: Madam Chair, ETS,  
22 Educational Testing Service.

23 MADAM CHAIR: Okay. Thank you.

24 Who owns the test?

25 MS. ZURKOWSKI: Madam Chair, I'll speak to



1 that. For the science and social studies assessments those  
2 are owned by the State of Colorado. For the PARCC  
3 assessments, those are jointly owned with the other states  
4 that helped develop and administer the PARCC assessments.  
5 Neither are owned by Pearson.

6 MADAM CHAIR: And would that same answer be  
7 true for who owns the data?

8 MS. ZURKOWSKI: Madam Chair, slightly  
9 different. When it comes to the Colorado data, for both  
10 the science and social studies assessments, as well as the  
11 English language arts and math assessments, that data is  
12 owned by Colorado, and solely Colorado.

13 MADAM CHAIR: Does Pearson do data mining on  
14 our kids' D2 (ph) teacher, or just does Pearson do data  
15 mining?

16 UNIDENTIFIED VOICE: Madam Chair. We do not  
17 do any data mining on your student data.

18 MADAM CHAIR: Okay. We do not do any.  
19 Listen, there, people.

20 Why do you collect total time on item?

21 MS. ZURKOWSKI: Madam Chair, I tried to, or  
22 began to address that earlier. Total time on data -- or,  
23 sorry -- total time on an item helps us to know which items  
24 should be included in future assessments and which items  
25 should not be included in future assessments.



1 MADAM CHAIR: In the sense that if it takes  
2 too long or not enough time?

3 MS. ZURKOWSKI: Madam Chair, so if we have  
4 an item that we expected a student to take a minute and a  
5 half on, and suddenly we find out that students, on  
6 average, are taking ten minutes, we will not utilize that  
7 item again.

8 MADAM CHAIR: So it's mostly a matter of  
9 utilizing for test time periods and that sort of thing.

10 Oh, this is the second part of that. It  
11 says "that" and I'm assuming the answer the first one.  
12 That is behavioral. How does that benefit the student? I  
13 would assume that they're thinking that some students might  
14 take ten minutes but others might not. Would you, you know  
15 --

16 MS. ZURKOWSKI: Madam Chair, again, that  
17 information is utilized for the purposes of future  
18 assessments, so that, again, we can try to keep those  
19 assessments at a length that is feasible, and so it has  
20 impact on future administrations.

21 MADAM CHAIR: So it only has impact on  
22 future tests. It does not have impact on the student that  
23 took ten minutes when everybody else did in three.

24 MS. ZURKOWSKI: Madam Chair, when it comes  
25 to scoring, whether a student answers correctly in 30



1 seconds or in three minutes or in ten minutes, it doesn't  
2 matter when it comes to scoring for that particular  
3 student.

4 MADAM CHAIR: Is Pearson beholden to COPPA  
5 laws - C-O-P-P-A?

6 UNIDENTIFIED VOICE: Madam Chair, for  
7 purposes of the state assessment program, COPPA does not  
8 apply. It's a recent ruling by the Federal Trade  
9 Commission because it's not a commercial software product.

10 MADAM CHAIR: Okay. So it does not apply.

11 UNIDENTIFIED VOICE: It does not.

12 MS. ZURKOWSKI: Madam Chair -- and I would  
13 like to remind folks that when it comes to data that is  
14 provided by the student, the student is not being asked to  
15 provide any of their personal information, and Pearson is  
16 not collecting anything in terms of like an email address  
17 or other ways for Pearson to be able to contact that  
18 student.

19 MADAM CHAIR: Okay.

20 All right. This is a long one. Let me look  
21 at it.

22 Federal grants awarded to PARCC include  
23 language, committing PARCC to share student-level data with  
24 the Department of Education on an ongoing basis. This  
25 makes it clear that PARCC is the recipient of student data



1 from its member states.

2 Go ahead, Joyce. Take a stab.

3 MS. ZURKOWSKI: Madam Chair, I will search  
4 through our MOU as well as the original grant application  
5 to try to understand exactly where that is coming from.  
6 Again, we will not handing off individual student-level  
7 data to the Federal Government.

8 MADAM CHAIR: We will not be handing off  
9 individual data to the Federal Government, and any further  
10 thing you'll have on the FAQs.

11 Okay. Security nondisclosure agreements  
12 prohibit school principals to read, view, or discuss any  
13 test materials. True? This agreement requires school  
14 principals to break in loco parentis, which is a higher law  
15 established in the 1700s and reviewed in 1996. School  
16 leaders who sign this agreement break their -- this isn't a  
17 question. This is a statement, kind of -- break their  
18 higher obligation to parents. There is no safeguard  
19 regarding inappropriate questions.

20 FERPA has changed and now relaxed third-  
21 party accesses now available without any parental  
22 notification or approval. FERPA is no longer a protection  
23 mechanism for parents. True or false, and anything to add?

24 MS. ZURKOWSKI: Madam Chair, I think you are  
25 correct that there is not a question there. There are



1 statements there.

2 MADAM CHAIR: Okay. Randy, this one's for  
3 you.

4 You referenced that psychometric staff.  
5 Please explain exactly what this staff does and why is a  
6 pressure parental permission for psychological study of our  
7 children's work product?

8 MS. ZURKOWSKI: Madam Chair, I'm going to  
9 try to address at least part of that question. The  
10 psychometric staff are the psychometricians who do the  
11 analysis of the data. They need to have access to some PII  
12 because as we look at, again, the issue of our items, we  
13 want to make sure that our items are fair across subgroups,  
14 so kids are actually being assessed on content and not  
15 whether they happen to be a boy or a girl.

16 Also, we are required to report out based on  
17 subgroup.

18 MADAM CHAIR: Okay. Last question, I  
19 believe. How is there any assurance that test content is  
20 grade-level appropriate if teachers, principals, et cetera,  
21 are not allowed to see the test or comment on it before,  
22 during, or after the test, per the PARCC handbook?

23 MS. ZURKOWSKI: Madam Chair, I'll address  
24 that one as well.

25 So the test is a secure test, just like many



1 of the assessments are that we have taken as children or  
2 our children have taken previously. In terms of having  
3 assurances that the items are appropriate, they go through  
4 a thorough review process before they are ever put on a  
5 test, that is done by several different educator groups.

6                   One educator group is looking at it from a  
7 content perspective. Is the content appropriate for that  
8 grade level? Is it matching the standard? Is it age  
9 appropriate? Another group looks at it from a bias and  
10 sensitivity perspective to ensure, again, that no  
11 particular group is unfairly advantaged or disadvantaged by  
12 a particular item. Those items are then field-tested.  
13 Based on field testing we look at data to make sure that we  
14 haven't missed anything unintentionally, before they're put  
15 onto an operational assessment.

16                   In terms of how parents can gain an  
17 understanding of what is going to be on the assessment,  
18 there have been sample items out there for several years.  
19 There are full practice tests that are available on the  
20 Web, and we can provide that link for all of you. And  
21 there is both an online version as well as a paper version  
22 for those items. And come fall, PARCC will be releasing  
23 what I'll refer to as a full set of items that were used  
24 operationally on the assessments this spring, so that  
25 parents, teachers, principals, content staff can see what



1 was actually on those assessments and will also be able to  
2 see how students performed on those assessments.

3 MADAM CHAIR: That was a real short answer  
4 there. Be that even though particular principals and  
5 teachers do not get to see this that they are field-tested  
6 by other principals and teachers at that level so that they  
7 would -- is that what -- they would approach the correct  
8 level.

9 MS. ZURKOWSKI: Madam Chair, I would suggest  
10 that in terms of educator eyes on the items, when we look  
11 at PARCC, there have been, for each item, at least 30  
12 different educators who have looked at each item. Colorado  
13 educators have spent approximately 20,000 hours involved in  
14 the PARCC assessment development process, and then, yes,  
15 those items do go through a field test process, but no,  
16 even at that point in time, individual principals shouldn't  
17 be looking at those items.

18 Again, once we go through the scoring  
19 process there will be released items. Those will be items  
20 that appeared on the actual test, with how students  
21 actually performed, as well as sample responses from  
22 students.

23 MS. FLORES: Madam Chair.

24 MADAM CHAIR: All right. Could I finish my

25 --





1 MS. FLORES: I'm sorry.

2 MADAM CHAIR: -- section here and then I'll  
3 ask you.

4 MS. FLORES: Thank you.

5 MADAM CHAIR: These are from a Pearson  
6 contract. What does Pearson do with the emotional data  
7 observations about behavior you gathered from this test?

8 UNIDENTIFIED VOICE: Madam Chair, we do not  
9 collect any such information.

10 MADAM CHAIR: No emotional data collected,  
11 is what you're saying?

12 MS. ZURKOWSKI: Madam Chair, I would like to  
13 -- because, again, there were questions earlier about where  
14 can some of these ideas be coming from. We do collect  
15 information through the surveys in terms of how the  
16 students interacted with the test, their experience, right.  
17 Were you able to navigate through the assessment? Would  
18 you prefer to take the assessment online or on paper? Were  
19 you able to utilize the tools? That is definitely part of  
20 what we're doing.

21 There is another unfortunate technical  
22 phrase that is used in the development of assessments, and  
23 it is "cognitive labs." And I think some people hear that  
24 and think, uh-oh, we're trying to do deep psychological  
25 analysis on their children. That's not what happens during



1 the cognitive labs. What happens during that time, again,  
2 is in small groups, before we administer the test live, is  
3 we wanted to make sure that students could interact with  
4 the system appropriately, that they weren't actually  
5 experiencing interference, that, you know, our 10-year-olds  
6 knew how to utilize that system.

7                   And so, yes, in small groups kids engaged  
8 with the system and gave feedback in terms of what was  
9 working, what was not working, and they did talk through,  
10 you know, "I'm having issues. I don't understand how I'm  
11 supposed to highlight." And that's the kind of information  
12 that was captured during those cognitive labs.

13                   MADAM CHAIR: Okay.

14                   Boy, this is really detailed. On page 5,  
15 line 3, or maybe it's page 3, line 5, PARCC commits to  
16 working with the Department to develop a strategy to make  
17 student-level data that results from the assessment system  
18 available on an ongoing basis for research. And then  
19 there's a question mark after that.

20                   MS. ZURKOWSKI: Madam Chair, again, when it  
21 comes to the individual student-level data that is produced  
22 from these assessments, that data is owned by Colorado.  
23 And I am now able to click through my slides.

24                   When it comes to how Colorado does share  
25 information, we do provide, obviously, individual student-



1 level information, school information, district-level  
2 information to the schools and the districts. We do post  
3 the aggregated student demographic and assessment results  
4 information by school, district, and state on the  
5 assessment website in SchoolView. Important to note, we do  
6 not post individual student-level data through those  
7 avenues. There are a limited number of CDE employees who  
8 are granted access to the assessment data if it's needed to  
9 inform or complete their work on behalf of the districts.  
10 CDE does not sell the individual student-level data.

11 Data and research requests that CDE receives  
12 are redirected back to the districts whenever possible, so  
13 that districts can make decisions as they deem appropriate.  
14 If data is provided through a research request it is de-  
15 identified and does not include student names or SASIDs.  
16 Approved requests are restricted to the identified  
17 requestors identified in the Student Data Protection,  
18 Accessibility, Transparency, and Accountability Act of  
19 2014. And all de-identified data that is released at the  
20 student level includes a corresponding data-sharing  
21 agreement, and you can see a listing of those data-sharing  
22 agreements at the link there.

23 When it comes time to make determinations  
24 about what kind of student-level data may or may not be  
25 released through our English language arts and mathematics



1 assessments, we will follow a very similar procedure.

2 MADAM CHAIR: That was a very thorough  
3 answer, Joyce.

4 Deb, let me finish this section and we  
5 should have time then for a couple of follow-up questions.

6 MS. SCHEFFEL: It relates directly to that  
7 answer. Shall we still wait?

8 MADAM CHAIR: Pardon?

9 MS. SCHEFFEL: My question, I think, relates  
10 to that answer. Should we wait?

11 MADAM CHAIR: That answer? Okay. Go ahead.

12 MS. SCHEFFEL: My question is, CDE does not  
13 sell data but it shares data, and that data can be sold. I  
14 mean, are these the nuances that the public is struggling  
15 with? In other words, what do the feds do with the data  
16 when they get it, or whoever else gets it? The feds get  
17 the data, disaggregated, but they can access -- I mean  
18 aggregated, but they can access disaggregated data. That's  
19 where the public concern is.

20 So the answer, strictly speaking, is right.  
21 CDE doesn't sell data. But if it shares the data with the  
22 feds, and they have access to algorithms within the  
23 aggregated data that allow them to disaggregate and do  
24 something with it, that's where the public concern lies.  
25 Can you speak to that? I apologize.



1 MS. ZURKOWSKI: Madam Chair, I would suggest  
2 that perhaps we need to have a follow-up conversation to  
3 this discussion today. Again, this issue of the sharing of  
4 data between the state and the Federal Government is,  
5 again, kind of outside of what we're prepared to talk about  
6 today, and, frankly, we may need some other people sitting  
7 here as well, in order to be able to answer completely.

8 MS. SCHEFFEL: Thank you.

9 MADAM CHAIR: Okay. Simple question.

10 MS. FLORES: My letter --

11 MADAM CHAIR: Does it relate to these  
12 questions I'm asking --

13 MS. FLORES: Yes.

14 MADAM CHAIR: -- or is it a separate  
15 question?

16 MS. FLORES: Yes, it does relate.

17 MADAM CHAIR: It relates directly to the  
18 questions from the audience.

19 MS. FLORES: Yes.

20 MADAM CHAIR: Let me finish and then -- I  
21 promise you, Val, you get to make a statement, okay?

22 MS. FLORES: Okay.

23 MADAM CHAIR: Because I'm in the middle of a  
24 process here.

25 Pearson has contracted with PARCC. PARCC



1 contracted with USDOE. Whose contract trumps the other?

2 MS. ZURKOWSKI: Madam Chair, so there was  
3 what were referred to as a contract in place. For  
4 simplicity's sake I will refer to it as PARCC, with the  
5 U.S. Department of Education for the development of the  
6 assessments. When it comes time to the administration of  
7 the assessments, that contract is between Colorado and  
8 Pearson.

9 MADAM CHAIR: Okay. And the final question  
10 -- Val, you'll be happy to know --

11 MS. FLORES: Yes.

12 MADAM CHAIR: -- high school student  
13 reported this week that they were asked questions such as -  
14 -

15 MS. ZURKOWSKI: And, Madam Chair, I'm going  
16 to ask that you read that -- sorry -- very carefully.  
17 Again, the assessments at this point in time are secure and  
18 I don't want us to be responsible for a breach across many  
19 state.

20 MADAM CHAIR: Okay.

21 MS. ZURKOWSKI: Apologies for interrupting  
22 you.

23 MADAM CHAIR: And I understand that, but  
24 this is the kind of thing. Can I ask it in a real general  
25 way?



1 MS. ZURKOWSKI: Absolutely.

2 MADAM CHAIR: If perhaps students were  
3 receiving questions such as "Do you attend church?" or "Are  
4 there any guns in your home?"

5 MS. ZURKOWSKI: Madam Chair, and again, I  
6 apologize for interrupting. I just wanted to make sure we  
7 weren't running into problems here.

8 MADAM CHAIR: No. I'm through. That was  
9 it.

10 MS. ZURKOWSKI: We attempted to address the  
11 issue of surveys earlier in our presentation. We provided  
12 links to the surveys that are connected to the PARCC  
13 assessment. There is not a survey that is being  
14 administered by Colorado, by Pearson, or by PARCC as a  
15 whole, at this point in time. There will be a survey that  
16 is given to students at the end of the assessment, at the  
17 end-of-year-assessment, and those questions are available,  
18 again, at that link that I showed you earlier.

19 MADAM CHAIR: At that link.

20 MS. ZURKOWSKI: Yes.

21 MADAM CHAIR: So they would not --

22 MS. ZURKOWSKI: We are not asking --

23 MADAM CHAIR: -- they would not have been  
24 asked, to this point.

25 MS. ZURKOWSKI: There is not a question



1 associated with the PARCC assessment or a Colorado  
2 assessment that asks about religious affiliation, gun  
3 ownership, drug use, or anything like that.

4 MADAM CHAIR: Okay.

5 UNIDENTIFIED VOICE: Madam Chair.

6 MADAM CHAIR: Yes.

7 UNIDENTIFIED VOICE: I'd also ask if any  
8 member hearing this conversation or in the public, we've  
9 received three or four of those so far, and we've tried  
10 everything we can to run them down to the level of the  
11 classroom that we're hearing that from, and so far we've  
12 not been able to identify one single thing. And we would  
13 ask if anybody else hears that, please let me know  
14 personally, so we can run that down, because that's just --  
15 in our books, that's forbidden.

16 MADAM CHAIR: Would need to identify --

17 UNIDENTIFIED VOICE: Right.

18 MADAM CHAIR: -- where it happened and what  
19 classroom.

20 UNIDENTIFIED VOICE: We were recently made  
21 aware of about 20 districts that received a letter that  
22 that's going around, and so if any of you hear that, please  
23 let me know so we can check it out.

24 MADAM CHAIR: And it wouldn't have anything  
25 to do with Pearson.





1 UNIDENTIFIED VOICE: No. We wouldn't dare  
2 ask.

3 MADAM CHAIR: All right. Val, you have your  
4 question, please?

5 MS. FLORES: Okay. Given the racist history  
6 of testing, and cultural fairness, I overview your tests,  
7 nine -- I'm sorry -- third, fifth, seventh, ninth, and  
8 11th. And I don't think any child would -- any minority  
9 child -- second language speaker, black child, and such,  
10 would find himself in that -- in all that test, meaning  
11 there was not an experience by such a child. The names of  
12 the writers, there was not a name that was Latino. In  
13 fact, it made -- you know, a point to go through the other.

14 And I know we're talking about the test, and  
15 I don't think there's going to be another chance for me to  
16 ask you. Why was this done? Why no trace of, say, my  
17 culture at all in that test. Why not the culture of a  
18 black child in that test? And I say that -- certainly  
19 there was Native American. I did see that.

20 But, you know, here you have, in this state  
21 you kind of just negate it, the experience of possibly, you  
22 know, two-thirds of the population, maybe even -- a large  
23 number. And we do have large numbers of wonderful writers,  
24 wonderful writers, who are Latino writers, Mexican-American  
25 writers, wonderful black writers. But yet we don't see any



1 of that experience in that. And I'm very concerned that  
2 that is not available, and that basically kids would go  
3 through a test like this and not see themselves in a name,  
4 or an experience, in any way. And I would say that you  
5 would be perpetuating, you know, that our history of  
6 testing.

7 MADAM CHAIR: Thank you, Val.

8 We have now reared end of our presentation.  
9 We have a few minutes, if you promise to keep it brief.

10 MR. DURHAM: Oh, I promise.

11 MS. FLORES: Is there an answer to this?

12 MADAM CHAIR: No. I don't think there's an  
13 answer. I thought it was just a statement on your part.

14 MS. FLORES: No. I'm asking why?

15 MS. ZURKOWSKI: Madam Chair, can I offer a  
16 brief response?

17 MADAM CHAIR: Sure.

18 MS. ZURKOWSKI: As I indicated earlier,  
19 passages and items do go through what we refer to as that  
20 bias and sensitivity process, and there is an effort to  
21 make sure that all student groups are reflected across the  
22 test. You did see a sample, not the entirety. But I will  
23 gladly take your feedback back to the group and indicate  
24 that you believe that we need to make more of an effort.

25 MS. FLORES: A big effort.



1 UNIDENTIFIED VOICE: Madam Chair, may I  
2 comment?

3 MADAM CHAIR: Steve was asked first.

4 UNIDENTIFIED VOICE: Oh, Steve.

5 MR. DURHAM: Just briefly. If you've got a  
6 room of 20 kids taking the test and they're all taking it  
7 by paper, do they all have exactly the same questions?

8 MS. ZURKOWSKI: Madam Chair.

9 MADAM CHAIR: Yes.

10 MS. ZURKOWSKI: No, they do not. So there  
11 are multiple forms that are used for both the paper version  
12 of this assessment as well as for the online version, and I  
13 would encourage you, again, to think about some of your pat  
14 experiences with testing. Take, as an example, SAT, right.  
15 Different forms are used and yet they are considered the  
16 same test and the results are comparable.

17 MR. DURHAM: So, in theory, they are normed,  
18 even though they're different questions.

19 MS. ZURKOWSKI: Madam Chair.

20 MADAM CHAIR: Yes.

21 MS. ZURKOWSKI: So, yes, they will go  
22 through that technical process that we referred to as  
23 equating, to ensure that they are comparable.

24 MR. DURHAM: So then the same room with  
25 people taking the test online, they would get different



1 questions, each -- not each of them but there would be  
2 several versions. How many versions in a class of 20?

3 MS. ZURKOWSKI: Madam Chair, the forms are  
4 actually what we refer to as spirals, and they are randomly  
5 assigned. So any particular group of 20 is not going to be  
6 identical, but it is fair to say that there is  
7 approximately eight forms of an assessment that are out  
8 there at this point in time.

9 MR. DURHAM: Is it possible -- once I start  
10 taking a test, the questions that I am going to answer are  
11 predetermined and don't change based on my correct or  
12 incorrect answers to other questions. Is that correct?

13 MS. ZURKOWSKI: Madam Chair, I appreciate  
14 you asking this because yesterday there was reference to  
15 the PARCC test being adaptive. The PARCC test is not  
16 adaptive. How you answer one question does not determine  
17 the next question that you get. In fact, students can  
18 actually go through that test in a backwards order if they  
19 want to. All of those items are predetermined.

20 MADAM CHAIR: Thank you. Deb.

21 MR. DURHAM: And then visiting back one  
22 item, to the keystroke question, it would at least be  
23 theoretically possible -- I mean, I have an article in  
24 front of me here about using keystrokes to determine  
25 emotional state, so apparently that's -- or at least there



1 are people who believe that's theoretically possible. And  
2 you collect that data, correct, between keystrokes or you  
3 do not collect it?

4 MR. SCHUESSLER: Madam Chair.

5 MADAM CHAIR: Yes.

6 MR. SCHUESSLER: We do not collect keystroke  
7 data. The only data we collect is, on essay responses,  
8 what was typed in in a text field, but no actual keystrokes  
9 or typing.

10 MR. DURHAM: So it's actually what's typed  
11 in, and then if it's -- and you keep all the versions of  
12 that, so if there are deletions or corrections, you have  
13 the versions.

14 MR. SCHUESSLER: We have an autosave every  
15 two minutes on the essay responses. Otherwise, it's saved  
16 on submission.

17 MADAM CHAIR: Okay. Wrapping up. Deb, last  
18 question.

19 MS. SCHEFFEL: I just wanted to say in  
20 response to Member Flores, just that as I read my version -  
21 - I guess there are eight versions, you said -- I did find  
22 cultural representation in terms of the names and the  
23 stories. So it might be that the different versions are  
24 different. But I just wanted to say that I did find it  
25 representative.



1                   And now I just had one quick statement. May  
2 I make a statement, Madam Chair?

3                   MADAM CHAIR: Okay. Go ahead.

4                   MS. SCHEFFEL: I just wanted to thank  
5 Pearson. You know, you are a business. We appreciate  
6 business. You're functioning as a business that's  
7 attempting to serve a statutory requirement. And if you  
8 did not exist, the Department of Education would have to  
9 increase its staff and reach, by huge numbers and  
10 infrastructure to accomplish this work. And so we  
11 appreciate you and we thank you for coming and for your  
12 presentation.

13                  I would also add, though, that as we forge  
14 public-private partnerships, if we don't keep the public in  
15 mind first, then we don't serve our state very well, and  
16 that is the responsibility of the legislature, of this  
17 Board, and of the Department of Education, which is our arm  
18 of implementation. So to the extent that we have parental  
19 issues, and that there are concerns, and that we haven't  
20 addressed them clearly, we need your input.

21                  But we, as a Board, need to work with the  
22 legislature and with the parents and with the Department of  
23 Education to create great clarity, and it sounds like some  
24 of the questions that have been raised today really relate  
25 to the relationships between the Federal Government, the



1 Department of Education, Pearson, other vendors, and that  
2 these relationships have not been fully exposed or  
3 delineated or made clear. And I think to the extent that  
4 we can do this work far better, we will serve the public  
5 far better. But we appreciate you coming.

6 MADAM CHAIR: Thank you, Deb, and I  
7 appreciate your comments there. And do the Pearson  
8 representatives have any closing statements you would like  
9 to make in this little session?

10 MR. SHERWOOD: Madam Chair, we'd just like  
11 to thank you for this opportunity to come and speak with  
12 you all this morning, so thank you.

13 MADAM CHAIR: All right. That will close  
14 this session and we'll take a five-minute break.

15 (Meeting adjourned)

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C E R T I F I C A T E

I, Kimberly C. McCright, Certified Vendor and Notary, do hereby certify that the above-mentioned matter occurred as hereinbefore set out.

I FURTHER CERTIFY THAT the proceedings of such were reported by me or under my supervision, later reduced to typewritten form under my supervision and control and that the foregoing pages are a full, true and correct transcription of the original notes.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 25th day of January, 2019.

/s/ Kimberly C. McCright  
Kimberly C. McCright  
Certified Vendor and Notary Public

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